

# VDSS Research Brief

## Participation in Child Care Assistance

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This research brief summarizes participation in the child care assistance program in Virginia, including the number of families served, length of assistance, as well as entries and exits to the program. The analysis utilizes a longitudinal data file from the Child Care Interim System that spans nearly 13 years (1996-2009). Results are provided at the family level for two categories of child care assistance recipients: families for whom child care assistance is mandated due to participation in Virginia Initiative for Employment not Welfare (VIEW, the TANF work program) and families for whom child care assistance is not mandated and who pay a co-payment for child care.<sup>1</sup>

### Key Findings

- *How many families are served by child care assistance programs?* The overall number of families receiving child care assistance peaked in 2005 and since then has declined. Ten years ago, families in the non-mandated program outnumbered mandated families by nearly 40 percent; however, since 2006 this gap has diminished with declines in the number of non-mandated families served. Based on discussions with program staff, this decline is attributed to changes in the way child care funds are allocated to local departments of social services.
- *How long do families typically receive child care assistance?* For the cohort of families who began receiving assistance in 2005 and 2006, most families received subsidies for about a year or less.
- *Do families frequently enter and leave the program?* Families in Virginia do not frequently cycle on and off child care assistance. Just over half of families (52 percent) have more than one episode of assistance, and families average just two spells of child care assistance. For those families who do come back after a break in assistance, most return after a short time (3 months or less).
- *What are the differences in participation between mandated and non-mandated families?* The analysis found few substantial differences between mandated and non-mandated families. Mandated families spent slightly less overall time in the program. Most families in the mandated program had 11 months assistance or less – this was slightly less than non-mandated families (13 months). Mandated families had shorter

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<sup>1</sup>“Child care subsidies are prioritized to TANF and VIEW families first as well as to families with special needs children. In Virginia, TANF participants are limited to two years of [TANF] assistance at a time, and five year of [TANF] assistance throughout their lifetimes. [Child care] assistance to non-TANF or non-VIEW families is based on income.” *Child Care Development Fund 101: Virginia’s Child Care Subsidy Program* (2008). Available from: <http://www.vakids.org/pubs/FES/2009CCDF%20One%20pager.pdf> The child care assistance income eligibility guidelines are available on page 34 (section 3.3.2) of Virginia’s Child Care and Development Fund Plan. This document is available from: [http://www.dss.virginia.gov/geninfo/reports/children/child\\_care.cgi](http://www.dss.virginia.gov/geninfo/reports/children/child_care.cgi)

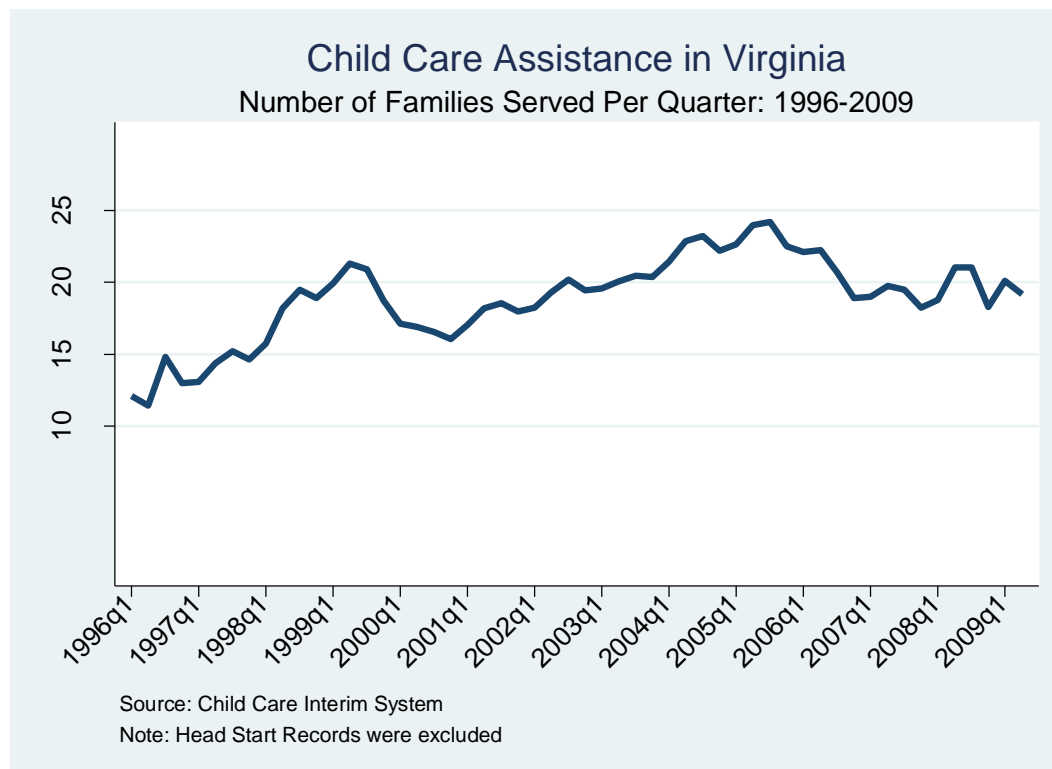
initial episodes of consecutive child care assistance and took slightly longer to reenter the program after they left for the first time.

- *How does Virginia's experience compare with that of other states?* Families in Virginia have more cumulative time and longer initial spells of child care assistance than families in several comparison states. Virginia families who initially leave the child care program tend to return more quickly to the program (within 3 months) than families in other states. However, Virginia families average just two spells of consecutive child care assistance, and this result is in line with research from other states.

### How many families are served by child care assistance programs?

Figure 1 shows the number of families served by quarter from 1996 to 2009. In recent years, approximately 20,000 to 25,000 families per quarter have received child care assistance. From late 2000 to 2005 the number of families served increased from 17,000 to 25,000 per quarter; however, the number of families receiving assistance peaked at the end of 2005 and has leveled off to around 20,000 families per quarter. Between 2006 and 2009, the program served an average of about 31,000 families per year.<sup>2</sup>

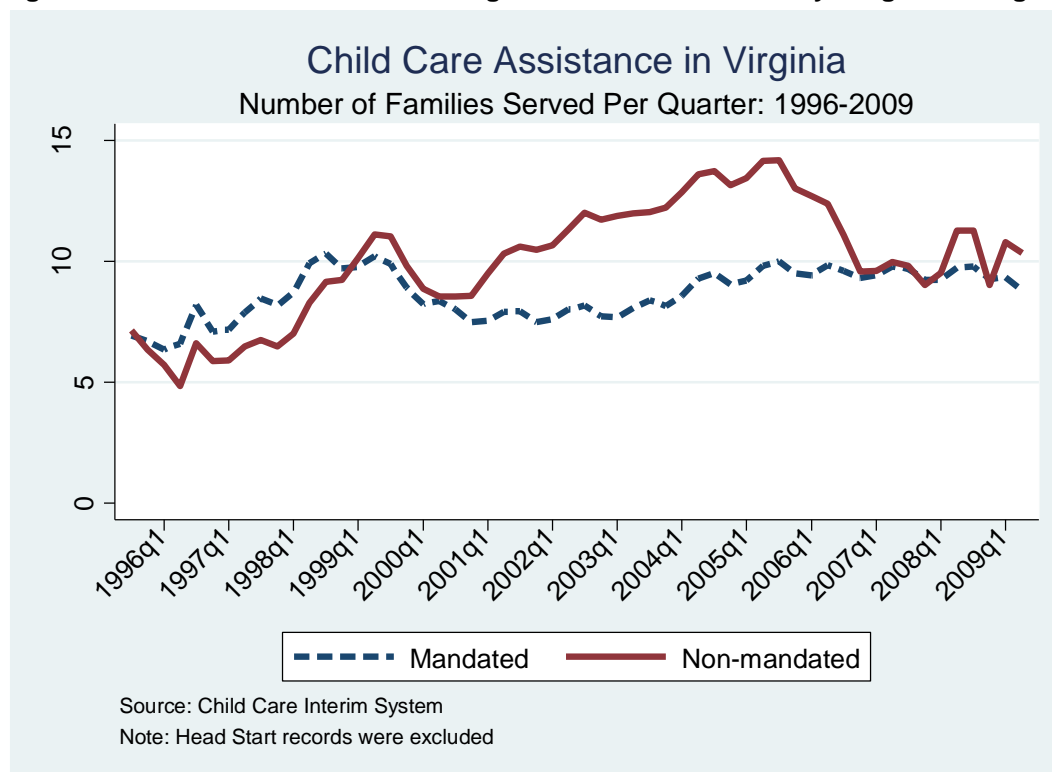
**Figure 1: Number of Families Receiving Child Care Assistance (1996-2009)**



<sup>2</sup> The number of families served over the course of a year is larger than the average number of families served in a quarter.

Figure 2 shows the number of families served by program category. Prior to 1999, mandated families exceeded non-mandated families; however, for the last 10 years, this trend has reversed. By 2002, non-mandated families outnumbered mandated families by nearly 40 percent; however, the gap between the groups began to close in state fiscal year 2006 with substantial declines in the number of non-mandated families. Based on discussions with program staff and an examination of the data, the decline appears to be due primarily to a change in pass-through policy beginning in state fiscal year 2006.<sup>3</sup> This change can also be seen in the decline in state expenditures for non-mandated child care since this time.<sup>4</sup> In contrast to the number of non-mandated families, the number of mandated families served has remained steady with approximately 10,000 families per quarter since 2005.

**Figure 2: Number of Families Receiving Child Care Assistance by Program Category**



<sup>3</sup> Prior to state fiscal year 2006, local agencies were able to request unlimited matching federal funds which were “passed through” to the local agencies by VDSS. This policy changed in 2006 when VDSS developed a statewide allocation methodology for child care assistance funds. Several local departments began serving families using only local funds, i.e., these funds were not matched by state or federal dollars. Families served only with local funds are not tracked in the Child Care Interim System; therefore, the number of families reported as being served declined.

<sup>4</sup> See page 31 of the *VDSS Annual Statistical Report* (2010). Available from: [http://www.dss.virginia.gov/files/about/reports/agency\\_wide/annual\\_statistical/2010\\_Stats\\_Report\\_Web\\_Version.pdf](http://www.dss.virginia.gov/files/about/reports/agency_wide/annual_statistical/2010_Stats_Report_Web_Version.pdf)

## For how long do beneficiaries typically receive assistance?

We determined how long families receive assistance using two different approaches. To determine how long people use benefits when they start a program, it is necessary to observe a specific group (cohort) of families over time. Using this approach, we find that families participate in the program for a relatively short period of time. However, we know from research in other social welfare programs that some families remain in programs for longer periods and that most of the program funds are spent on them.<sup>5</sup> An additional analysis of families at a particular point in time (“snapshot”) provides a view of families while they are in the midst of receiving benefits. By using both cohort and point-in-time approaches for duration estimates, we can better understand how long families receive child care assistance.

For the cohort approach, we identified families who first began receiving benefits in 2005 and 2006. We then determined how long these families continued to receive benefits through May 2009 (the most recent month of data). Table 1 provides estimates of the cumulative months (duration) of child care assistance for these families.<sup>6</sup> The median is 12 months, which means that half of families receive child care assistance for one year or less. The average is slightly longer (15 months), because a minority of families receive assistance for much longer periods.

This can be seen in the “snapshot” or point-in-time approach, which includes a higher proportion of long-term recipients. We examined all families who received child care assistance during May 2009. To estimate their length of stay, we assumed that, on average, these families were in the middle of their total time receiving child care assistance.<sup>7</sup> Table 1 shows that the median length of assistance is 2.5 years, meaning that half of families receiving assistance at a point in time will receive assistance for 2.5 years or less (32 months). The average duration is longer than the median because a minority of families receives assistance for much longer. The point-in-time approach gives longer estimates than the cohort approach because it is more likely to include long-term recipients.

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<sup>5</sup> According to the authors of a pivotal study of welfare dynamics, “[t]he vast majority of people starting welfare at a point in time and the vast majority of people who ever have spells on welfare stay only a short time. Yet the vast majority of welfare recipients at a point in time are in the midst of a much longer spell, and most welfare funds are spent on them.” Bane, Mary Jo and Ellwood, David T. *Welfare Realities: From Rhetoric to Reform*. Harvard University Press, 1996. This pattern appears to also apply to child care and other social programs.

<sup>6</sup> These estimates are the total number of months of benefits – they are not necessarily consecutive months.

<sup>7</sup> We looked back in time to determine how many months they had received child care assistance and then doubled these months to determine cumulative time (duration).

**Table 1: Cumulative Time (in months) for the Child Care Assistance Program**

Population	Length of Stay (months)	
	Mean	Median
Entry cohort (2005-2006)	15	12
Monthly “snapshot”	47	32

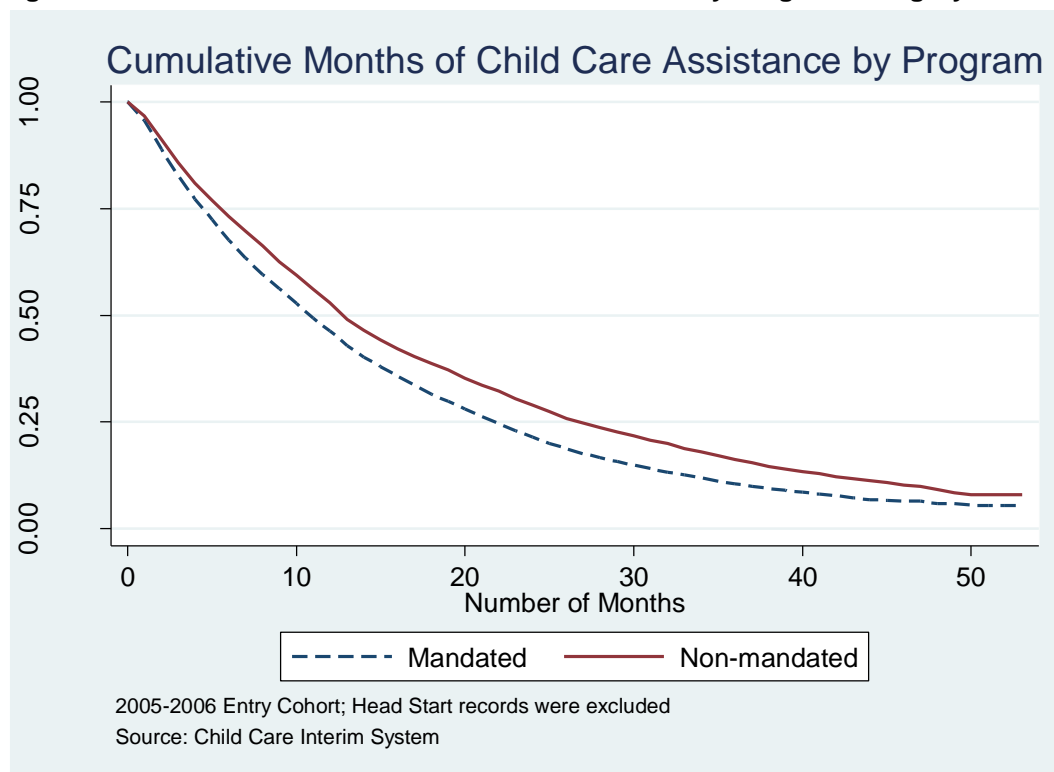
Source: Child Care Interim System (1996-2009)

The cohort mean of 15 months may be an underestimate because some families were still receiving child care assistance in the last month of data (May 2009).

Note: Head Start records were excluded

Figure 3 shows the difference in cumulative program months by program category for the entry cohort. Mandated families had slightly less total program time than non-mandated families. Median program duration was similar for both groups – 11 months for the mandated participants and 13 months for the non-mandated participants. Table 2 provides the differences in cumulative program time for each percentile of families. Twenty-five percent of mandated families had durations of 23 months or more while 25 percent of non-mandated families used subsidies for 28 months or longer.

**Figure 3: Cumulative Months of Child Care Assistance by Program Category**



**Table 2: Cumulative Time (in months) for the Child Care Assistance by Program Category**

	Length of Stay (months)		
	Percentile		
Population	25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>
Mandated	5	11	23
Non-mandated	6	13	28
Total	6	12	25

Source: Child Care Interim System (1996-2009); 2005-2006 entry cohort; adjusted for censoring

Note: Head Start records were excluded

### Do families frequently enter and leave the child care assistance program?

The tendency of families to move on and off social welfare programs can be examined by analyzing their “spells” or consecutive months of assistance. Table 3 provides information on the first spell, the time to re-entry from the first spell, and the average total number of spells per family.<sup>8</sup> Using the experience of the 2005-2006 entry cohort, the first spell of assistance was 6 months or less for most families. Figure 4 shows that the first spell for mandated families (5 months) was slightly shorter than for non-mandated families (8 months). Just over half (52 percent) of all families had second spells, and mandated families were more likely to have a second spell (57 percent) than were non-mandated families (46 percent). For those families with a second spell, the median time between the first and second spells was just 3 months. Mandated and non-mandated families had similar reentry times between the first and second spells. Over time most families had an average of 2 spells – indicating that they were not repeatedly cycling on and off the program.

**Table 3: Spell Information from Entry Cohort**

	Percentile			Number of Families	Percent
	Mean	25 <sup>th</sup>	50 <sup>th</sup>		
Length of first spell (months)*		3	6	13	15,446 100%
Mandated		2	5	12	7,981 52%
Non-mandated		3	8	16	7,465 48%
Time from first to second spell (months)*		2	3	9	8,009 52%
Mandated		2	4	9	4,563 57%
Non-mandated		2	3	8	3,446 46%
Total spells per family	2	1	1	2	17,279 100%
Mandated	2	1	2	2	9,107 53%
Non-mandated	2	1	1	2	8,172 47%

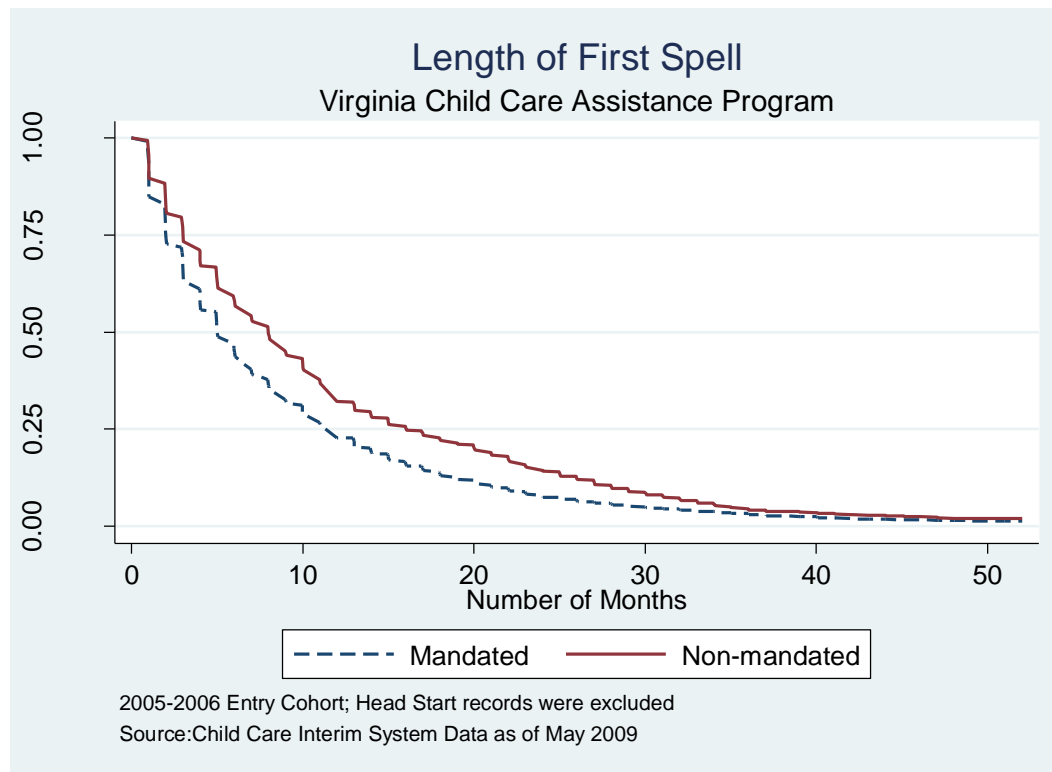
\*Adjusted for censoring

Source: Child Care Interim System (1996-2009); 2005-2006 entry cohort

Note: Head Start records excluded

<sup>8</sup> A spell was defined as a break of one month or more in child care assistance.

**Figure 4: Length of Initial Spell of Child Care Assistance**



## Comparison to Other States

Several other states have analyzed the dynamics of their child care subsidy programs by examining the duration of benefit receipt and length of initial spells. Table 4 provides the available statistics from a number of these studies. All of these studies used a cohort perspective. Two of the studies estimated cumulative time (duration) of child care assistance. Virginia's mean duration of 15 months was considerably longer than a 2006 Oregon study (8 months) but much shorter than a Wisconsin study of TANF child care assistance recipients (27 months).

Figure 5 shows that child care assistance beneficiaries in Virginia had longer initial spells (median of 6 months) than several states. The 2006 Oregon study found that the median length of the initial spell was 4 months with a mean of 12 months between the first and second spells. In a five-state study, initial spell length ranged from a high of 7 months (Texas) to a low of 3 months (Oregon), but only Texas had a first spell as long as Virginia's. In a separate study, the median spell length for families in Rhode Island (10 months) was also higher than in Virginia (6 months). In all but one state (Illinois), recipients of cash assistance had shorter initial spells than families who did not receive cash assistance. These results are in line with the shorter total duration and shorter initial spells of the mandated recipients in Virginia.

After an initial break in child care assistance, recipients in Virginia had shorter return times than other states. However, the Virginia families did not repeatedly cycle on and off child care assistance. For those Virginia families who returned to the child care assistance program, most returned within 3 months; these results are consistent with the return times from the Wisconsin study (median of 4 months). Rhode Island and Oregon (2006) showed slightly higher average return times of 5 and 12 months, respectively. Child care assistance recipients in Virginia averaged just 2 spells of assistance – this result was the same for the Rhode Island and Oregon (2006) studies.



**Table 4: Research from Other States**

	VA (2010) <sup>9</sup>	WI (2009) <sup>10</sup>	RI (2005) <sup>11</sup>	OR (2006) <sup>12</sup>	IL (2002) <sup>13</sup>	MD (2002) <sup>13</sup>	MA (2002) <sup>13</sup>	OR (2002) <sup>13</sup>	TX (2002) <sup>13</sup>
Subsidy Duration (months)	12 (median)	27 (mean)		8 (mean)					
Cash assistance	11	27							
No cash assistance	13								
Length of first spell (median months)	6	6	10	4	6	4	5	3	7
Cash assistance	5	6	9		6	4	5	3	5
No cash assistance	8		12		5	5	7	4	8
Time from first to second spell (months)	3 (median)	4 (median)	5 (mean)	12 (mean)					
Total spells per family	2 (mean)	3 (mean)	2 (median)	2 (mean)					

<sup>9</sup> Source: Child Care Interim System (1996-2009)

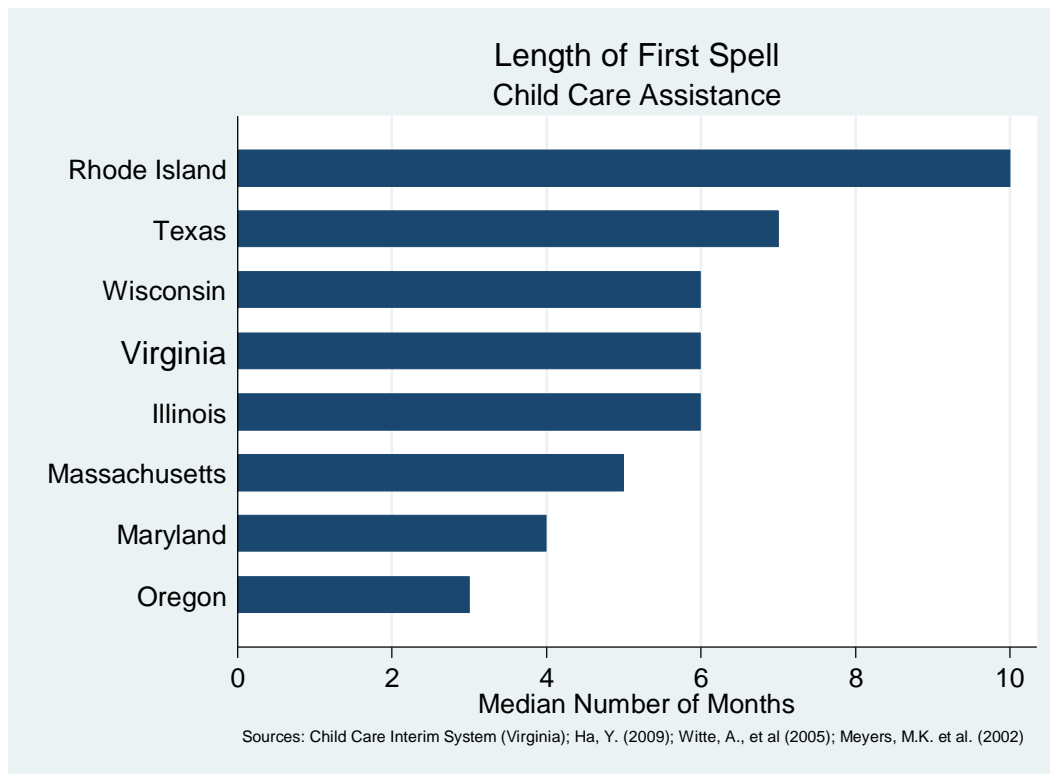
<sup>10</sup> Ha, Y. (2009). *Stability of Child-Care Subsidy Use and Earnings of Low-Income Families*. Social Service Review (December).

<sup>11</sup> Witte, A.D. and Queralto, M. (2005). *An examination of the duration of child care subsidies in Rhode Island: Impacts of policy changes and cross state comparisons*. Wellesley, MA: Wellesley Child Care Research Partnership.

<sup>12</sup> Grobe, D., et al. (2006) *Why do they leave? Child care subsidy use in Oregon*. Corvallis, Oregon: Oregon Child Care Research Partnership.

<sup>13</sup> Meyers, M.K., et al. (2002). *The dynamics of child care subsidy use: A collaborative study of five states*. New York: National Center for Children in Poverty.

**Figure 5: Length of First Spell – Virginia and Other States**



## Data Sources and Analysis Approach

The data consisted of annual extracts from the Virginia Child Care Interim System from state fiscal years 1996 to 2006 and local fiscal years 2007 to 2009. These data represent payments at the child level from the child care program. The extracts were appended to create one file from 1996 to 2009 (with overlapping months removed). Records for the Head Start program were excluded from the analysis. Although the data were provided at the child level, the unit of analysis for this study was the family (variable name casenq). If a family had more than one record for a service month (i.e., received assistance for more than one child), we deleted the duplicate records. We then calculated total time (duration) in the child care assistance program as the sum of all months of receipt. These months may or may not have been consecutive. In other words, the duration is the *total time* a family receives child care assistance and not the length of each spell of child care assistance.

For the “cohort” estimate, we identified all families who began receiving child care assistance in any month between January 2005 and December 2006 and counted the total number of months of child care assistance through May 2009. We examined the total months for each year’s cohort separately – the average number of months was similar for the two cohorts. We used survival analysis techniques to take into account families who continued to receive child care assistance during the most recent month of data.<sup>14</sup> The combined entry cohorts (approximately 26,000 families) received child care assistance for an average of 15 months. This population under-represents long-term child care assistance recipients.

We used two methods in developing the “snapshot” estimates. For the first method, we identified all families receiving child care assistance in June 2002. We then identified the total number of months those families received assistance by looking back from June 2002 and then looking forward (up to May 2009) from that time as well. Those families received an average of 43 months of child care assistance. In the second method, we identified all families receiving child care assistance in May 2009 (the most recent month of data) and counted the total months of child care assistance back to 1996. We then doubled the number of months, on the assumption that individuals receiving assistance in a particular month are, on average, in the middle of their total time receiving assistance. The average number of months for the May 2009 group was 47 months – similar to the June 2002 group. Because the estimates from the May 2009 group are more recent, we felt they more accurately represented the current experience of families receiving child care assistance for longer time periods. However, this population under-represents short-term recipients of child care assistance.

To determine whether a family was mandated or non-mandated, we first mapped the program codes for each payment record to a program category. Table 5 shows how the categories were mapped to the mandated and non-mandated categories. Although some families’ records consistently fall into one category, it was necessary to determine the

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<sup>14</sup> Some families will continue to receive child care assistance after the data collection ends – these families are censored. In calculating duration, survival analysis techniques adjust for censored observations. Failing to adjust for censoring would underestimate duration.

program category for families where the category changed over time. For example, a family might begin child care assistance as a mandated family and then transition off cash assistance to a non-mandated status. We examined all of the records for a family in the data set, and determined the category that occurred most often (mode) for all of the records for a family. If a family had the same number of mandated and non-mandated records, the family was coded as a non-mandated family.

**Table 5: Mapping of Program Codes to Mandated/Non-mandated Categories**

<b>Program Code</b>	<b>Description</b>	<b>Category</b>
506	FSET	Mandated
507	FSET	Mandated
517	Transitional VIEW	Mandated
521	Fee System	Non-mandated
522	Fee System Pass Thru	Non-mandated
524	TANF Education/Training Pass Thru (non-VIEW)	Mandated
527	TANF Education/Training (non-VIEW)	Non-mandated
528	TANF Education/Training Matching (JOBS)	Mandated
529	TANF Working (non-VIEW)	Mandated
533	Child Care Block Grant FY95	Non-mandated
534	Child Care Block Grant FY96	Non-mandated
535	Child Care Block Grant	Non-mandated
540	VIEW	Mandated
541	Transitional (former VIEW)	Mandated
543	LEARNFARE	Mandated
544	Head-Start Wrap Around	Excluded
545	Fee System 100% Federal	Non-mandated
546	TANF Education/Training (JOBS)	Mandated
547	TANF Education/Training (non-JOBS)	Non-mandated

Table 6 shows the number of families in the entire file as well as for each estimate (cohort and snapshot) in total and by program category.

**Table 6: Number of Families in Analysis Files**

	<b>Number of Families</b>	<b>Percent</b>
All families file	142,545	100%
Mandated	73,074	51%
Non-mandated	69,471	49%
Cohort estimate	26,430	100%
Mandated	11,982	45%
Non-mandated	14,448	55%
Snapshot estimate	17,545	100%
Mandated	7,924	45%
Non-mandated	9,621	55%

Source: Child Care Interim System (1996-2009)

Note: Head Start records were excluded

For the analysis of spells, we used the 2005-2006 entry cohort history file. To determine the number of spells for a family, we removed duplicate months of assistance (for more

than one child). Spells were defined as consecutive months of assistance with no break in assistance of longer than 31 days. Families were excluded from the analysis if a spell continued or began in May 2009 (most recent month of data). We calculated the length of the initial spell (in months) and the maximum number of spells for the family. For those families with more than one spell, we calculated the amount of time (in months) between the first and second spells.